AMENDMENTS TO THE CLAIMS:

This listing of claims replaces all prior versions, and listings, of claims in the application:

Listing of Claims:

1-30. (Canceled)

31. (Currently Amended) ~~Cell~~ Granular cell culture carriers to which cells can adhere to and grow on surfaces thereof, each of the granular cell culture carriers comprising:

a magnetic particle having a base body having a surface, the base body being formed by compounding a resin material and a magnetic material so that the magnetic material is dispersed in the resin material; and

a coating layer containing a calcium phosphate-based compound, the coating layer being provided to cover at least a part of the surface of the base body of the magnetic particle so that the cells can adhere thereto.

32. (Withdrawn) The combination as claimed in claim 51, wherein a density of the carrier is in the range of 0.8 to 2.5 g/cm^3.

33. (Withdrawn) The combination as claimed in claim 51, wherein the cell is an anchorage-dependent cell, when the average particle size of the cell culture carriers is defined as A μm and the maximum length of the anchorage-dependent cell that can adhere to the cell culture carrier is defined as B μm, A/B is 2 to 100.

34. (Withdrawn) The combination as claimed in claim 51, wherein the particle size of the cell culture carriers is in the rage of 50 to 500 μm.

35. (Canceled)

36. (Withdrawn) The combination as claimed in claim 51, wherein the coating layer is formed from particles of the calcium phosphate-based compound wherein the particles being partially embedded into the magnetic particle at the vicinity of the surface of the base body.

37. (Withdrawn) The combination as claimed in claim 36, wherein the particles of the calcium phosphate-based compound are formed from porous particles, and the coating layer is formed by colliding the porous particles to the surface of the base body of the magnetic particle.

38. (Canceled)

39. (Withdrawn) A cell culture apparatus, comprising:

a cell culture vessel for storing a cell culture solution containing at least cells to be cultured and granular cell culture carriers to which the cells are allowed to adhere and grow thereon; and

at least one magnetic field generator for applying a magnetic field to the culture solution to agitate the culture solution by the effect of the magnetic field.

40. (Withdrawn) The cell culture apparatus as claimed in claim 39, wherein each of the carriers comprises a magnetic particle having a surface and a coating layer which is provided to cover at least a part of the surface of the magnetic particle so that the cells are allowed to adhere thereto, wherein the cell culture carriers are moved in the culture solution by the application of the magnetic field, thereby agitating the culture solution.

41. (Withdrawn) The cell culture apparatus as claimed in claim 39, further comprising a culture solution, and wherein the culture solution further contains magnetic particles, and the magnetic particles are moved in the culture solution by the application of the magnetic field, thereby agitating the culture solution.

42. (Withdrawn) The cell culture apparatus as claimed in claim 39, wherein the magnetic field generator is constructed so that the intensity of the generated magnetic field is changed with the lapse of time.

43. (Withdrawn) The cell culture apparatus as claimed in claim 39, wherein the magnetic field generator is constructed so that the position of the generated magnetic field is changed with the lapse of time.

44. (Withdrawn) The cell culture apparatus as claimed in claim 39, wherein the magnetic field generator is arranged around an outer periphery of the cell culture vessel.

45. (Withdrawn) The cell culture apparatus as claimed in claim 39, wherein the magnetic field generator is constructed and arranged so as to come into contact with the culture solution.

46. (Withdrawn) The cell culture apparatus as claimed in claim 39, wherein the magnetic field generator is arranged in the vicinity of the liquid surface of the culture solution contained in the cell culture vessel.

47. (Withdrawn) The cell culture apparatus as claimed in claim 39, wherein the at least one magnetic field generator includes two or more magnetic field generators.

48. (Withdrawn – Currently Amended) The combination as claimed in claim [[31]] 51, wherein the magnetic material is present only in the vicinity of the surface of the base body.

49. (Withdrawn) The combination as claimed in claim 33, wherein when the average particle size of the magnetic particles is defined as C μm, C/A is 0.02 to 10.

50. (Withdrawn - Currently Amended) The combination as claimed in claim [[31]] 51, wherein the magnetic material includes ferrite.

51. (Withdrawn) In combination, cell culture carriers to which cells can adhere to and grow on surfaces thereof, and a cell culture apparatus for use with the cell culture carriers; the cell culture apparatus comprising:

a cell culture vessel for storing a cell culture solution containing at least cells to be cultured and granular cell culture carriers to which the cells are allowed to adhere and grow thereon; and

at least one magnetic field generator for applying a magnetic field to the culture solution to agitate the culture solution by the effect of the magnetic field; and

each of the cell culture carriers comprising:

a magnetic particle having a base body having a surface, the base body being formed by compounding a resin material and a magnetic material so that the magnetic material is dispersed in the resin material; and

a coating layer containing a calcium phosphate-based compound, the coating layer being provided to cover at least a part of the surface of the base body of the magnetic particle so that the cells can adhere thereto.

52. (Withdrawn) The combination as claimed in claim 51, further comprising a culture solution, and wherein the cell culture carriers are moved in the cell culture solution by the application of the magnetic field, thereby agitating the cell culture solution.

53. (Withdrawn) The combination as claimed in claim 51, further comprising a culture solution, and wherein the culture solution contains magnetic particles, and the magnetic particles are moved in the culture solution by the application of the magnetic field, thereby agitating the culture solution.

54. (Withdrawn) The combination as claimed in claim 51, wherein the magnetic field generator is constructed so that the intensity of the generated magnetic field is changed with the lapse of time.

55. (Withdrawn) The combination as claimed in claim 51, wherein the magnetic field generator is constructed so that the position of the generated magnetic field is changed with the lapse of time.

56. (Withdrawn) The combination as claimed in claim 51, wherein the magnetic field generator is arranged around an outer periphery of the cell culture vessel.

57. (Withdrawn) The combination as claimed in claim 51, wherein the magnetic field generator is constructed and arrange so as to come into contact with the culture solution.

58. (Withdrawn) The combination as claimed in claim 51, wherein the magnetic field generator is arranged in the vicinity of the liquid surface of the culture solution contained in the cell culture vessel.

59. (Withdrawn - Currently Amended) The combination as claimed in claim [[31]] 51, wherein the at least one magnetic field generator includes two or more magnetic field generators.